



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,151	09/07/2004	Tomoyuki Shudo	450100-04899	4086
7590 William S Frommer Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151			EXAMINER CHANG, YEAN HSI	
			ART UNIT 2835	PAPER NUMBER
			MAIL DATE 06/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/507,151	<b>Applicant(s)</b> SHUDO ET AL.	
	<b>Examiner</b> Yean-Hsi Chang	<b>Art Unit</b> 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 12 is objected to because of the following informalities: The "the main body" on line 10 lacks antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over NEC Corp. (JP 2000-196720 A, hereon NEC'720) in view of Opela et al. (US 7,037,443 B2), further in view of AAPA (Applicant Admitted Prior Art as set forth in page 2, paragraph starting line 11), Toshiba Corp. (JP 10-312334 A, hereon Toshiba), SanGiovanni (US 6,850,784 B2), and Sony Corp. (JP 2002-9907 A, hereon Sony).

Regarding claim 1, NEC'720 teaches a portable display apparatus comprising: a main body (6, fig. 1) substantially in the form of a rectangular solid and having a main surface (5), and a cover (3) that has its one surface (2) facing the main body (shown in fig. 4) made to have substantially the same dimensions as those of the main surface of

the main body (fig. 6), wherein the cover has a support portion (22, shown in fig. 1) and a display portion (20) arranged along the longitudinal direction thereof, and the support portion is coupled to the main body at a position apart from the center along the longitudinal direction thereof (shown in fig. 2) through a first axis (8) that is perpendicular to the main surface of the main body, and pivotable around the first axis on the main surface of the main body (see fig. 2), and the display portion has arranged thereon a display panel (20) facing the main body (see fig. 4), and is coupled to the support portion through a second axis (7) that is perpendicular to the first axis (see fig. 2), and pivotable around the second axis, wherein upon rotation of the support portion approximately 90 degrees around the first axis (180° shown in fig. 1, it may be 90°), the display portion is rotatable separate from the support portion (by comparing figs. 1 and 4) approximately 180 degrees around the second axis (shown in fig. 1). NEC'720 fails to teach the main body having a depression formed therein, the depression adapted to support at least one button such that the at least one button does not protrude from the main body and such that the at least one button is covered by tile cover when the cover is in a closed position and such that the at least one button is used to change or select information displayed on the display panel. Opela teaches a portable display apparatus (fig. 5) comprising: a main body (127) having a depression (at a location of 501) formed therein, the depression adapted to support at least one button (501) such that the at least one button does not protrude from the main body (shown in fig. 5) and such that the at least one button is covered by tile cover when the cover is in a closed position (as shown in fig. 4) and such that the at least one button is used to change or select

information displayed on the display panel (see col. 8, line 34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the main body of NEC'720 with the depression taught by Opela for preventing the button from obstructing the movement of the cover.

Regarding claim 2, NEC'720 in view of Opela fails to teach the display panel having its aspect ratio set to be 16:9, and the longitudinal direction of the display panel corresponds to the longitudinal direction of the main body before being pivoted. AAPA teaches a display of dimension 16:9, and being aligned in either direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'720 in view of Opela with the display taught by AAPA for a better vision of the display.

Regarding claims 3-5, NEC'720 in view of Opela fails to teach that the display panel displays data stored in a semiconductor storage medium which is a detachable memory card and is able to be inserted into an insertion slot formed at one end of the main body. Toshiba teaches a display panel (11) displays data stored in a semiconductor storage medium (3) that is cable of being inserted into an insertion slot (18) formed at one end of a main body (1b). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'720 in view of Opela with the semiconductor storage medium taught by Toshiba for increasing the flexibility of the display.

Regarding claims 6-7 and 11, NEC'720 in view of Opela fails to teach one end of the main body along the longitudinal direction coupled to the support portion and

Art Unit: 2835

corresponding one end of the support portion are formed into round shape, and the first axis is located at substantially the center of the rounded portion, and the end of the rounded portion of the support portion has arranged thereon an operation unit that controls displaying data on the display panel. SanGiovanni teaches a display apparatus (100, fig. 1) comprising a main body (104) having one end (to the right of 104 in fig. 1) along a longitudinal direction coupled to a support portion (left portion of 102) of a cover (102) and corresponding one end of the support portion are formed into round shape (shown in fig. 1), and the end of the rounded portions of the support portion and the main body have been arranged thereon operation units (116 and 120) that controls displaying data on the display panel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'720 with the display apparatus taught by SanGiovanni for a nice appearance and comfortable to handle.

Regarding claim 8, NEC'720 further teaches the second axis is arranged at one side of the cover corresponding to the pivot direction around the first axis (shown in fig. 2).

Regarding claim 9, NEC'720 in view of Opela fails to teach the second axis is interlocked with a power switch of the portable display apparatus, and the power switch is turned on when the display portion rotates more than a predetermined angle. EC'158 teaches a power switch (43) interlocked with an axis (13), which is turned on when the cover portion (12) rotates more than a predetermined angle (see paragraph [0012]) for power savings and user convenience. It would have been obvious to one having

Art Unit: 2835

ordinary skill in the art at the time the invention was made to modify the device of NEC'720 in view of Opela with the power switch taught by NEC'158 for power savings and user convenience.

Regarding claim 10, NEC'720 in view of Opela fails to teach the main surface of the main body has formed thereon a track pad that is a planate pointing device. Sony teaches a display apparatus (fig. 2) comprising a track pad (9) that is a planate pointing device being provided on a main surface of a main body (10) of the display apparatus for operational convenience. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'720 in view of Opela with the track pad taught by Sony for operational convenience.

4. Claims 12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over NEC CORP. (JP 2001-169166 A, hereon NEC'166) in view of Opela, further in view of Sony Corp., Toshiba, NEC Corp. (JP 2000-69158, hereon NEC'158), and Everett (US 6,701,162 B1).

Regarding claim 12, NEC'166 teaches a portable electronic device (fig. 1) comprising: a first body (10) through which a first rotational axis (31, fig. 1) extends, a second body (20+30) connected to the first body (shown in fig. 1) at a point (near 30) on the first body through which the first rotational axis extends, said second body including a first (30) and a second (20) portions, and further comprising a second rotational axis (32), wherein the second portion of said second body is rotatable, separate from the first portion, about the second rotational axis through an arc of at least 180 degrees (shown

in comparing figs. 10 and 11), and wherein said entire second body is rotatable about the first axis through an arc of at least 90 degrees away from the first body (see fig. 1). NEC'166 fails to teach the first body having a depression formed therein, the depression adapted to support at least one button such that the at least one button does not protrude from the main body and such that the at least one button is covered by tile cover when the cover is in a closed position and such that the at least one button is used to change or select information displayed on the display panel. Opela teaches a portable display apparatus (fig. 5) comprising: a first body (127) having a depression (at a location of 501) formed therein, the depression adapted to support at least one button (501) such that the at least one button does not protrude from the first body (shown in fig. 5) and such that the at least one button is covered by tile cover when the cover is in a closed position (as shown in fig. 4) and such that the at least one button is used to change or select information displayed on the display panel (see col. 8, line 34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the first body of NEC'166 with the depression taught by Opela for preventing the button from obstructing the movement of the cover.

Regarding claims 14-16 and 20, NEC'166 further teaches the first and second rotational axes being perpendicular to each other (shown in fig. 1) (claim 14); wherein one of the first or second bodies includes a display (21) (claim 15); wherein one of the first or second bodies includes a key pad (fig. 9) (claim 16); and wherein the device is a cellular telephone (see fig. 14) (claim 20).



Regarding claim 17, NEC'166 in view of Opela discloses the claimed invention except one of the first or second bodies including a track pad. Sony teaches a display apparatus (fig. 2) comprising a track pad (9) that is a planate pointing device being provided on a main surface of a first body (10) of the display apparatus for operational convenience. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'166 with the track pad taught by Sony for operational convenience.

Regarding claim 18, NEC'166 in view of Opela discloses the claimed invention except one of the first or second bodies being configured to receive a memory card. Toshiba teaches a portable electronic device (11) comprising a main body having a slot (18) being configured to receive a memory card (3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'166 in view of Opela with the slot taught by Toshiba for receiving a memory card for increasing the functional flexibility of the device.

Regarding claim 19, NEC'166 in view of Opela discloses the claimed invention except the second axis being interlocked with a power switch of the portable display apparatus, and the power switch is turned on when the display portion rotates more than a predetermined angle. NEC'158 teaches a power switch (43) interlocked with an axis (13), which is turned on when the cover portion (12) rotates more than a predetermined angle (see paragraph [0012]) for power savings and user convenience. It would have been obvious to one having ordinary skill in the art at the time the invention

was made to modify the device of NEC166 with the power switch taught by NEC'158 for power savings and user convenience.

Regarding claim 21, NEC'166 in view of Opela discloses the claimed invention except the device being a portable dictionary. Everett teaches a portable electronic device (10, fig. 1) comprising a dictionary function for storing and recognizing purposes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of NEC'166 with the dictionary features taught by Everett for storing and recognizing purposes.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Correspondence***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 08:00 - 16:00, Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2835

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

/Yean-Hsi Chang/  
Primary Examiner  
Art Unit: 2835  
June 4, 2007